

This manual was printed from a PDF and was not included with an original CMMG Rifle. If you have any doubts as to the authenticity of the any rifle that came with this manual please contact us.



COPY

AR-15

5.56x45/.223

OPERATION/MAINTENANCE MANUAL



Thank you for choosing CMMG, Inc.
Please follow all instructions in this manual before operating
firearm.

Fundamental Firearm Safety Rules.

1. Always keep the firearm pointed in a safe direction.
2. Always keep your finger off the trigger until ready to shoot.
3. Always keep the firearm unloaded until ready to use.
4. Be sure the firearm is safe to operate.
5. Know how to use the firearm safely.
6. Use only the correct ammunition for the firearm.
7. Know the target and what is beyond.
8. Wear appropriate eye and ear protection.
9. Never use alcohol or drugs before or while shooting.
10. Store firearms so that they are not accessible to unauthorized persons.
11. Be aware that certain types of firearms and many shooting activities require additional safety precautions.

Failure to follow these rules can result in damage to property, injury or death. Always follow these instructions and carefully read and refer to this manual before loading firearm.

This is NOT a safety manual.
If you need assistance with the safe handling of this, or any firearm,
please contact a certified firearms instructor or school.

Table of Contents

Operating Procedures

Unloading and Clearing Your Rifle	1
Loading and Firing Your Rifle	3
Zeroing Your Sights	5

Basic Care and Maintenance

Disassembly Instructions	7
Upper Maintenance	10
Bolt and Carrier Maintenance	12
Lower Maintenance	13
Reassembly Instructions	14
Function Check	15
Warranty Information	16
Ammunition Warning	17
Trouble Shooting Guide	19
Contact Information	23

Please familiarize yourself with this manual and the operation of your particular firearm. To ensure that you get the best performance and reliability from your new CMMG firearm, please read through all of the procedures listed in this manual before attempting to perform any of the described actions. If any part of this manual is unclear to you, please contact us before attempting the procedure.

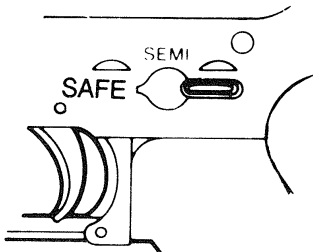
All complete firearms and uppers are headspaced and test fired before shipping.

Clean your firearm before using for the first time.

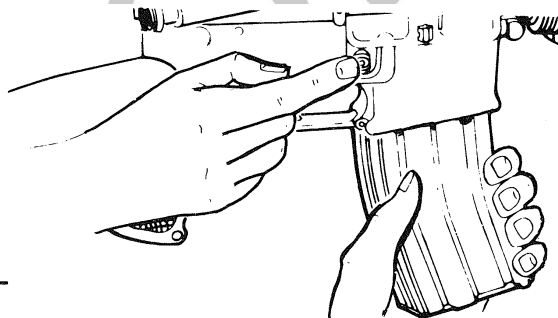
Unloading and Clearing Your Rifle

To unload your rifle:

1. Keep your rifle pointed in a safe direction for the duration of the procedure.
2. Place your selector on "SAFE". You cannot select "SAFE" unless the hammer is cocked.



3. Depress the magazine catch button and remove the magazine.

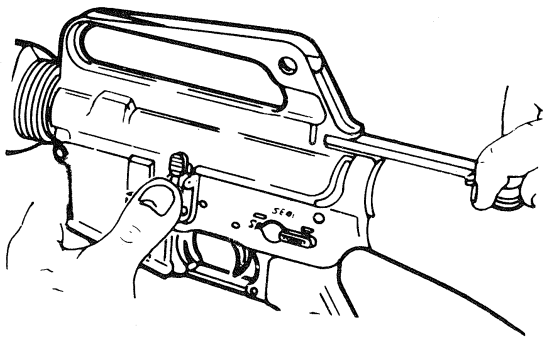


4. Eject the chambered cartridge by retracting the charging handle until it stops. Let the ejected cartridge fall to the ground.

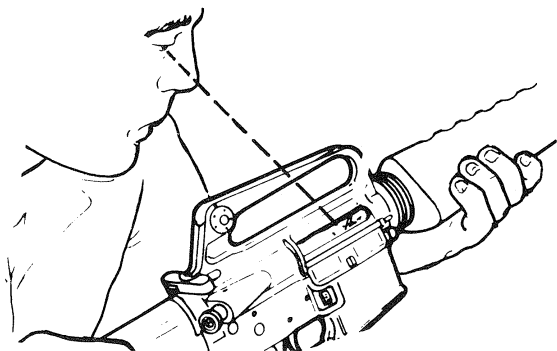
Unloading and Clearing Your Rifle

continued.

5. Lock the bolt open by depressing the bottom of the bolt catch. If you cannot manipulate the charging handle and the bolt catch at the same time, you can use an empty magazine, which will activate the bolt catch for you.



6. Push the charging handle forward until it clicks to re-latch the charging handle.
7. Inspect the chamber and receiver to ensure you have removed all cartridges from the action.



Your rifle is now Unloaded and Clear. It may now be loaded or prepped for transportation or storage.

Loading and Firing Your Rifle

To load and fire your rifle:

Begin with a rifle that has been verified to be unloaded using the preceding directions.

1. Keep your rifle pointed in a safe direction for the duration of the procedure.
2. Load your magazine with .223 Remington or 5.56x45 NATO cartridges. Place cartridge between the magazines feed lips and push down to seat.
3. Using firm and steady pressure insert the loaded magazine into the magazine well until the magazine catch locks the magazine in place. Do not slam the magazine into position; it will damage your magazine and rifle. Pull the magazine down to verify that it is locked in place.
4. Get into the shooting position you plan to use. Grasp the pistol grip in one hand and the handguard in the opposite hand with the buttstock to your shoulder.
5. To chamber a cartridge you may depress the bolt catch or retract the charging handle until the bolt is no longer being held by the bolt catch. Release the charging handle. Do not maintain control the of the charging handle while chambering a cartridge; this will cause the rifle to jam.

Your rifle is now loaded.

Loading and Firing Your Rifle

Continued.

The following is a description of the sequence for one complete firing cycle; beginning after a cartridge is chambered. Knowing the correct function of your rifle will help you with the diagnosis of any malfunctions or failures to fire.

The trigger is pulled releasing the hammer; which strikes the firing pin. The firing pin impacts the primer in the chambered cartridge igniting the primer which ignites the powder. As the powder is burned it creates a high volume of gas, which propels the bullet down the bore of the barrel. The exhaust gas is also vented out of the bore through the barrel's gas port, into the front sight base and through the gas tube and into the carrier key on the bolt carrier. The gas pushes the bolt carrier back unlocking your bolt from the barrel extension allowing the bolt carrier to recoil completely. The underside of the bolt will push the hammer down where it is caught and held by the disconnecter. The bolt will pull the spent cartridge out of the chamber and eject it from the rifle.

At full recoil the carrier has pushed the buffer and buffer spring back into the receiver extension. The magazine will present a new cartridge, which will be stripped from the magazine by the bolt as the recoil spring pushes the bolt carrier group back into battery. The new cartridge is now chambered. The fire control group will reset once you have released the trigger allowing the disconnecter to release the hammer and re-engage the trigger's sear. The rifle is ready to be fired again or put on "SAFE" and unloaded.

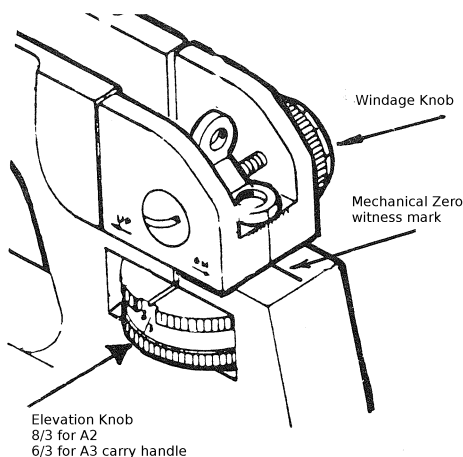
6. Align your sights on your target.
7. Place the selector on "FIRE"; Your rifle is now ready to shoot.
8. Squeeze the trigger until the hammer is released.

Zeroing Your Sights

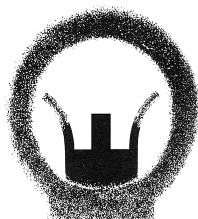
U.S. Marine Corps 25-Meter Zeroing Procedure

By following the steps below and establishing a zero at 25 meters using a 25-meter sight in target, your rifle sights will be set with a 300-meter battlesight.

Do not move front sight post at this time; it was set at the factory and should be very close to your zero. The rear sight aperture should also be centered from the factory with the unmarked (large) aperture up. If the aperture is not centered, turn the windage knob clockwise to adjust the aperture to the right or counter-clockwise to adjust the aperture to the left until centered; this is called “mechanical zero windage”.



1. Rotate elevation knob in the down direction (counter-clockwise). The elevation knob should stop three clicks past the 300-meter mark. The rear sight should be all the way down on the last whole “click” before it bottoms out. This is called “mechanical zero elevation” for the rear sight. If your range scale will not line up in the above manner, an armorer will be required to adjust the range scale for you.
2. Rotate the elevation knob “up” one click past the 300-meter mark. From this point on the rear sight elevation knob should not be moved. Any changes in elevation required in the following zeroing steps are made to the front sight post only.



3. Carefully aim and fire at the center of the target bull's-eye. Take your time and be sure to use the sight picture illustrated.

Zeroing Your Sights

Continued.

4. If your shot group is not in the center of the bulls-eye, use the squares on the target sheet to calculate the required “clicks” necessary to move your next shot group into the bulls-eye.

Changes in elevation are made by moving the front sight post. The squares are numbered around the edges of the target to equal the number of clicks required to move the shot group to the bull's-eye. In order to raise your next shot group, rotate the front sight post clockwise. One click will move the strike of the bullet one vertical square on the target sheet. In order to lower your next shot group, rotate the front sight post counter-clockwise. One click, as above, equals one square.

Changes in windage are made with the windage knob. Three clicks will move the strike of the bullet one horizontal square on the target sheet. In order to move the shot group to the left, turn the windage knob counter-clockwise. In order to move the shot group to the right, turn the windage knob clockwise.

5. Carefully aim and fire another group at the center of the target bulls-eye. Repeat steps 3 through 5, if required.

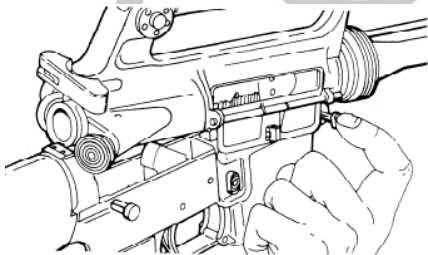
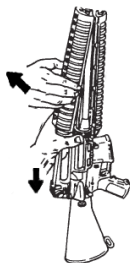
If your group is on target, your sight is now “calibrated.” To place your actual 300-meter zero on the rifle, you must rotate the elevation knob one click “down.” The range scale’s 300-meter mark should now be aligned with the mark on the receiver.

This manual was printed from a PDF and was not included with an original CMMG Rifle. If you have any doubts as to the authenticity of the any rifle that came with this manual please contact us.

Disassembly Instructions

Before disassembling your rifle please unload and clear your rifle as described in the unloading directions.

1. Reverify your rifle is unloaded and return the bolt and carrier in to battery.
2. If you need to remove the handguards it is easier to do so while the upper is joined to the lower. The handguards can remain in place for all end user maintenance. Place the butt of the rifle on a solid surface. Pull down on the Delta ring with even tension on each side, at the same time pulling one section of the two piece handguard away from the other. Set the first half aside and repeat the process for the remaining half.
3. Partially push the rear take down pin and the front pivot pin from left so they are not captured by the detents that retain them in the receiver in the closed position. Use a Delrin Take down Pin Punch if needed.



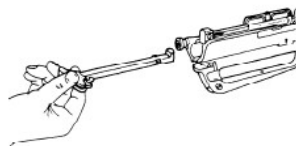
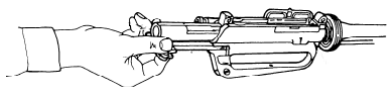
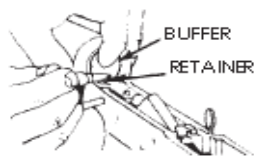
4. Pull the rear take down pin the rest of the way to the right side of the lower receiver until it engages the detent that holds the pin in the open position.

5. Pivot the lower receiver away from the upper receiver.
6. Pull the front pivot pin the rest of the way to the right side of lower receiver until it engages the detent that holds the pin in the open position.

Disassembly Instructions

Continued.

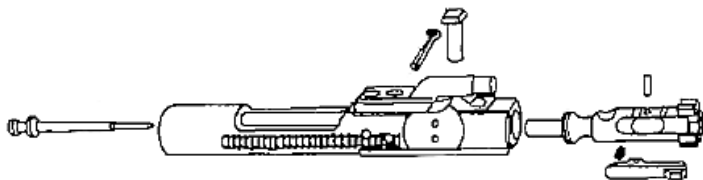
7. The upper and lower receivers are now separated; set the upper receiver aside.
8. Remove the buffer and buffer spring from the lower receiver by depressing the buffer detent. Maintain tension on the buffer face while removing; it is under pressure from the recoil spring. You may need to hold the hammer down to allow the buffer and spring to be removed from receiver extension.



9. Set the lower receiver, buffer and recoil spring aside and pick the upper receiver back up.
10. Pull the charging handle to rear and remove bolt and carrier assembly. Set the bolt and carrier assembly aside.
11. Remove the charging handle by pulling it backwards until it is aligned with the key way. The charging handle may now be lifted from the upper receiver.
12. Set the upper receiver and the charging handle aside and pick the bolt carrier assembly back up.

13. Disassembly Instructions

Continued.



14. Remove the firing pin retaining pin from the left side of the bolt. You may use a small screwdriver or punch to hook the loop the end of the firing pin retaining pin makes.
15. Tilt bolt face up and remove firing pin from the rear of the bolt carrier.
16. Push bolt into the carrier until it rotates and comes to a stop (in battery position) .
17. Turn cam pin 90° and lift it out from bolt and carrier.
18. Pull bolt forward out of carrier. Set the carrier aside.
19. With a punch, remove the extractor pin from the bolt assembly. Slight pressure applied to the extractor will ease removal of the extractor pin.
20. Remove the extractor. The extractor spring and elastomer insert should be captured in the extractor; do not remove the spring and elastomer from the extractor.

Your rifle is now field stripped for cleaning.

Do not disassemble your firearm any further than described.

Any maintenance that requires further disassembly should be performed by CMMG or a qualified gunsmith.

Basic Care and Maintenance

Proper maintenance will ensure you get the best performance from your firearm. High quality cleaning products will ensure that you get your rifle clean quickly and without damage to your firearm. The Mil-Spec cleaning kit is great for field use, but a good set of cleaning tools and a one-piece cleaning rod will make your task easier at home. There are also many excellent cleaning products available to shooters today. We do not recommend any specific brand, so use what you like. Just make sure that it is safe to use on the parts you are cleaning.

Upper Maintenance

1. Use cleaning fluid on the bore and chamber, the gas tube, the upper receiver and barrel assembly, locking lugs and all areas of powder fouling, corrosion, dirt or dust.
2. Install the chamber brush on the cleaning rod, dip the brush in cleaning fluid and insert it into the chamber and locking lugs. Clean by pushing and twisting the cleaning rod.
3. Install the bore brush on the complete cleaning rod. Dip the brush in cleaning fluid. Run the rod through the chamber and flash suppressor or muzzle brake several times.
4. Take the bore brush off the rod and install a swab holder and a swab. Apply cleaning fluid to the swab; then run it through the chamber and out the flash suppressor (if applicable). To remove carbon build up, let the solvent sit, then wipe clean. Wipe the bore dry by running clean swabs all the way through from the chamber to the flash suppressor.
5. Once the patches come out dry they should be clean. If not repeat steps 3 and 4.

Upper Maintenance

continued.

6. Use a worn out bore brush to clean the outside surface of the protruding gas tube.
NOTE: Heat will discolor your gas tube, do not try to remove this discoloration.
7. Wipe the charging handle with a patch dipped in solvent; wipe off solvent with a dry cloth.
8. Inspect the upper assembly for any worn, broken or damaged parts. Replace any faulty parts with quality CMMG replacement parts.
9. Lightly lubricate the bore and chamber, outer surface of the barrel and front sight, under the handguards and the charging handle.
10. With a lubricated swab, run the rod from the receiver to the flash suppressor or muzzle brake. Do not over lubricate.
11. Lubricate the locking lugs.
12. Drip lubricant onto the front sight detent. Then depress the detent to work the lubricant in.
13. Reassemble upper.

Bolt and Carrier Maintenance

WARNING: Never interchange bolts between rifles.

1. Clean all parts and outer surfaces of the bolt carrier assembly with a swab saturated with cleaning fluid.
2. Clean the bolt carrier key with a worn bore brush dipped in cleaning fluid and dry with a pipe cleaner.
3. Remove carbon deposits and dirt from the locking lugs with a cleaning brush dipped in cleaning fluid.
4. Clean the areas behind the bolt rings and under the lip if the extractor.
5. Press the ejector in repeatedly to remove accumulated brass shavings from the ejector hole and assure the ejector moves freely.
6. Inspect the bolt assembly for cracks or fractures, especially in the cam pin hole area. Inspect the firing pin retaining pin for bends, breaks or dents. Inspect the bolt cam pin for cracks or chips. Inspect the firing pin for bends, cracks, or a sharp, chipped or blunted tip.
8. Lubricate the bolt carrier, bolt, cam pin, firing pin and firing pin retaining pin. Be sure to coat the inner and outer surfaces and the cam pin area of the bolt carrier. Place one drop of lubricant inside the key. Flush the ejector with lubricant and cycle the plunger enough to ensure the ejector spring is well lubricated.
9. Reassemble bolt and carrier.

Lower Maintenance

1. Remove any dirt or debris from the trigger group with a cleaning brush and/or cotton swab dipped in cleaning fluid.
2. Remove powder fouling, corrosion and dirt from the lower receiver with a cleaning brush and/ or cotton swab dipped in cleaning fluid.
3. Use a pipe cleaner to clean the buttstock screw vent hole.
4. Clean the buffer, recoil spring and inside of the lower receiver with a cleaning brush and/or cotton swab dipped in cleaning fluid.
5. Examine the lower receiver assembly for any worn, broken or damaged parts. Replace any faulty parts with quality CMMG replacement parts.
6. Lightly lubricate the lower receiver and the internal parts of the lower receiver assembly.
7. Reassemble the lower receiver.

Reassembly Instructions

Begin reassembly with the upper receiver.

1. Insert extractor and spring assembly into bolt by pushing extractor assembly down and aligning the pivot hole in the extractor with the hole in bolt and insert extractor pin. If the spring comes loose, seat the large end of spring in the extractor.
2. Stagger the bolt rings to prevent gas loss.
3. Slide bolt assembly into bolt carrier assembly with extractor claw on the carrier's right side.
4. Align the bolt's cam pin hole with the carriers cam pin slot. Insert bolt cam pin and rotate it 90°.
5. Insert firing pin in opening at the rear of the bolt carrier and seat. You may need to rotate the cam pin into alignment to allow the firing pin to seat.
6. Pull bolt assembly forward and replace firing pin retaining pin. When correctly installed the firing pin will not fall from the bolt carrier assembly and cannot be removed.
7. Install charging handle assembly into upper receiver. Leave the charging handle halfway out of the receiver.
8. Install the bolt carrier assembly. The bolt must be extended from bolt carrier so the cam pin will not prevent the bolt carrier groups installation.
9. Push charging handle assembly and bolt carrier assembly together into upper receiver.
10. Re-install the buffer and spring into the lower receiver.
11. The hammer must be cocked and the selector lever must be on SAFE before installing the upper onto the lower.

Reassembly Instructions

continued.

12. With the bolt carrier in battery, close ejection port cover.
13. Align the pivot pin holes and push pivot pin in.
14. Pivot the lower receiver towards the upper receiver. When aligned push in take-down pin.
15. If you removed the handguards, place the butt of the rifle on a solid surface. Pull down on the delta ring with even tension on each side. At the same time push one section of the two piece handguard into position. Repeat the process for the remaining half.
16. Perform the function check on your rifle.

Function Check

To avoid accidental firing, be sure cartridge magazine is removed and chamber is clear.

1. Pull charging handle assembly to rear and release.
2. Place selector lever on SAFE. Squeeze trigger. Hammer should not fall.
3. Place selector lever on FIRE. Squeeze trigger. Hammer should fall.
4. Hold trigger to the rear. Cycle the action. Release trigger. You should hear a click as you release the trigger as the disconnecter hands the hammer off to the trigger.
5. Squeeze trigger again. Hammer should fall.

If your rifle fails any of these tests check your assembly. If the rifle will not pass these checks and it has been assembled properly, contact CMMG or a qualified gunsmith for assistance.



Warranty Information

CMMG, Inc. will warranty factory built firearms against defects in material or workmanship for the life of the firearm. CMMG, Inc. will pay for warranty repairs at no charge to the customer. All warranty work will be carried out at CMMG. Please supply a copy of the sales invoice and proof of purchase.

The use of Wolf ammunition or other steel case ammunition will void warranty. The use of re-loaded ammunition, proof rounds or ammunition that exceeds SAAMI specifications will void warranty. Any repairs or modifications not done by CMMG will void warranty. Any modifications of barrel, including reaming, turning down barrel to lighter profile, threading or rethreading barrel for attachments will void warranty.

Non-CMMG merchandise that is available through CMMG Inc. falls under the warranty policies set forth by their individual manufacturer. Any warranty claims for these products must be directed to the individual manufacturer. CMMG Inc.'s warranty policies do not cover, extend, modify or supplant non-CMMG merchandise, whether included as original equipment or made available as factory modification.

CMMG, Inc. sells both complete firearms and components, firearms kits in part or whole. If you have received a CMMG, Inc. firearm and it does not meet your full expectation please contact CMMG, Inc. and confirm that the firearm with the CMMG Inc. lower receiver is in fact a CMMG, Inc. manufactured firearm.

Ammunition Warning

With the growing popularity of the AR-15/M16 family of rifles the demand for ammunition has risen sharply. Unfortunately, this has made quality ammunition hard to find. CMMG recommends using only domestic, commercially manufactured ammunition or high quality surplus NATO specification ammunition.

Using any reloaded ammunition, any steel cased ammunition or Wolf Ammunition VOIDS your Limited Lifetime Warranty.

When purchasing domestically produced ammunition, questions can be answered by contacting the manufacturer directly. They will have the most accurate information about their products. If you have a problem with any ammunition be sure to have the lot number from the packaging that the ammunition in question came from; the manufacturer will need this information.

When purchasing surplus ammunition, it is not likely that the manufacturer is known or can be contacted. Most surplus ammunition is not from questionable sources, but some surplus ammunition is from rejected lots that did not meet a required specification. Find out as much as you can or purchase a small sample of the surplus ammunition before purchasing larger quantities. AR-15.com has the Ammo Oracle, located at <http://ammo.ar15.com/ammo/> and can answer most questions on ammunition. Many message boards will also have posts with reviews on ammunition by members. While these resources do not represent the final authority in ammunition related issues, they serve as a helpful guide for general information concerning various types of ammunition.

Before Firing Any Ammunition, inspect each cartridge for defects. Dispose of cartridges that exhibit any of the following defects:

- Deformed brass. Including burrs, cracks, dents, scratches, bent or bowed cases.
- Deformed bullet. Including burrs, dents and scratches.
- Improperly seated bullets. The case neck should be uniform with no deformations and the bullet should be seated tightly in the case. Check overall length to ensure the bullet is not seated too deeply or has been pushed in from an impact. Some ammunition may have a colored sealant around the case neck.

Ammunition Warning

Continued.

- Improperly seated primers. The primer should be flush with the base of the case with no visible damage to the primer cup. Some ammunition may have a colored sealant around the primer.
- Corroded cartridges. Any amount of metal that is corroded and eaten away.
- Do not fire cartridges exposed to extreme heat (135 F°) until they have cooled.

Warning Signs

Not all defective ammunition has visible traits to distinguish it from good ammunition. If any cartridge from a lot of ammunition exhibits any of the following characteristics, discontinue the use of the entire lot and contact the manufacturer or dispose of the ammunition properly.

1. Inconsistent function. This can also be a firearm related malfunction. Clean and test the rifle with another source of ammunition. If proper function is restored discontinue the use of the suspect ammunition immediately.
2. Blown primers. This is an indication of improper powder charge. Discontinue the use of the suspect ammunition immediately.
3. Inconsistent sound. Noticeably louder or quieter reports indicate improper powder charge. Discontinue the use of the suspect ammunition immediately.
4. Cartridge fails to chamber. This can also be a firearm related malfunction. Clean and test the rifle with another source of ammunition. If proper function is restored discontinue the use of the suspect ammunition immediately.

Other ammunition related problems can occur. If you believe that ammunition you are using is performing in an inconsistent manner, do not take any chances that you are experiencing a one-off occurrence. Discontinue the use of the suspect ammunition and contact the manufacturer.

Your rifle is a sizable investment. Make every effort to use quality ammunition, to ensure your safety and and prolong the life of your firearm for years of enjoyment.

Troubleshooting

Selector will not engage "SAFE".

UNLOAD Rifle First.

Inspect for

Fire control group is not cocked.

Primer in fire control group.

Selector frozen on "FIRE".

Too many cartridges in magazine.

Resolution

Fire control must be cocked.

Remove and discard.

Disassemble, Clean, Lubricate and assemble correctly.

Remove excess cartridges.

Magazine fails to lock into magazine well.

Inspect for

Dirty or corroded magazine catch.

Worn or broken magazine catch.

Defective magazine.

Defective magazine catch spring.

Resolution

Disassemble, Clean, Lubricate and assemble correctly.

Replace magazine catch.

Replace magazine.

Replace magazine catch spring.

Ammunition will not feed into chamber.

Inspect for

Magazine not fully seated.

Too many cartridges in magazine.

Incorrect caliber cartridges.

Carbon in chamber, carrier key or on gas tube.

Dirt, corrosion, or carbon buildup in barrel locking lugs.

Dirty or defective magazine.

Dirty or corroded ammo.

Damaged ammo.

Action of buffer assembly is restricted.

Ejector or extractor is frozen.

Resolution

Seat magazine with firm pressure.

Remove excess cartridges.

Replace with correct caliber Cartridges.

Clean.

Clean locking lugs on barrel and bolt.

Clean and lubricate or replace.

Clean.

Replace.

Take out buffer and spring and clean.

Clean and oil or replace.

Troubleshooting

Failure to FIRE

UNLOAD Rifle First.

Inspect for	Resolution
Selector on "Safe".	Move Selector to "Fire"
Selector frozen on "Safe".	Disassemble, Clean, Lubricate and assemble correctly
Excess fouling or carbon on firing pin or in firing pin recess.	Disassemble, Clean, Lubricate and assemble correctly
Excess oil in firing pin recess.	Remove excess oil with pipe cleaner
Improper assembly of firing pin.	Assemble Correctly (page 11)
Hammer spring installed incorrectly	Assemble Correctly (page 11)
Weak or broken hammer spring	Replace
Broken Firing pin or hammer	Replace
Defective Ammunition.	Remove and discard
Bolt not locked in battery	Extract cartridge, clean area.

Failure to Extract

Inspect for	Resolution
Fouling or carbon in chamber.	Clean.
Fouling or carbon in extractor tip or recess.	Clean.
Damaged or missing extractor spring.	Replace.
Damaged or missing extractor spring insert.	Replace.
Dirty or corroded ammunition.	Remove and discard.
Frozen or worn extractor	Dissemble and clean or replace.
Restricted buffer assembly.	Dissemble and clean.
Restricted movement of bolt carrier group.	Remove, clean, and lube. When reinstalling the bolt carrier group check to insure it moves freely in the upper receiver.)
Clogged gas tube	Replace.
Gas system is short stroking	See section on short stroking.

Troubleshooting

Bolt Fails to Lock Open on Last Round

Inspect for	Resolution
Dirt, corrosion, or carbon buildup in bolt and carrier.	Clean.
Dirt, corrosion, or carbon buildup in barrel locking lugs	Clean.
Ejector frozen	Clean and oil.
Defective magazine	Replace.
Dirty or corroded bolt catch	Clean or replace.
Burred or broken bolt	Contact a qualified gunsmith or CMMG
Rifle recoil spring in carbine stock	Install correct spring. Carbine spring should be 36 coils versus 44 for the A1 or A2 rifle.
Gas system is short stroking	See section on short stroking.

Short Stroking

Inspect for	Resolution
Gaps in gas rings (not staggered)	Stagger gas rings
Gas rings worn	Replace gas rings
Carbon or dirt in carrier or on outside of gas tube	Clean
Obstruction inside of carrier key	Remove obstruction and clean
Weak or reloaded ammunition	Replace with factory fresh ammunition.
Dirty rifle	Clean.
Improper lubrication	Lubricate generously.
Loss of gas power	Check and clean entire gas path
Defective magazine.	Replace magazine. Procedure for immediate action on next page.

Troubleshooting

Cartridge Jammed in Action

Cartridge jammed between bolt and magazine or feed ramps.

Bolt Over Base Failure

Double feed.

1. Remove magazine
2. Pull back and hold charging handle to the rear.
3. With the rifle positioned muzzle up; strike the buttstock on the ground.
4. When the bolt is free of the cartridge lock the bolt open with the bolt catch.
5. Remove and discard damaged casings or cartridges.
6. Inspect the rifle for damage.

Spent casing lodged between bolt and charging handle.

1. Remove magazine
2. Push in on bottom of bolt catch.
3. With the rifle positioned muzzle up strike the buttstock on the ground.
4. The impact should dislodge the bolt from the casing and lock open.
5. Remove and discard damaged casings if they did not fall out of the action on there own.
6. Inspect the rifle for damage.

Warning: If either of these procedures fail, do not attempt to disassemble the rifle and consult a qualified gunsmith.



Contact Us

CMMG Inc.
P.O. Box 369
Fayette, MO. 65248

sales@cmmginc.com

nfa@cmmginc.com

techsupport@cmmginc.com

Phone
(660) 248-2293
FAX
(660) 248-2290

Visit our website
www.cmmginc.com

This manual was printed from a PDF and was not included with an original CMMG Rifle. If you have any doubts as to the authenticity of the any rifle that came with this manual please contact us.